

CLAIMS:

BEST AVAILABLE COPY

1. A method of manufacturing a polymer-dispersed liquid crystal cell, in which method a mixture, which predominantly comprises a liquid crystalline material as well as reactive monomers and a photoinitiator, is sandwiched between two substrates, which are provided with an electrode layer, whereafter the mixture is polymerized under the influence of radiation, characterized in that the mixture comprises two types of non-volatile, reactive monomers, the first type of monomer being readily miscible with the liquid crystalline material and the second type of monomer being poorly miscible with said liquid crystalline material.

2. A method as claimed in Claim 1, characterized in that the first type of monomer is an ethoxylated alkyl-phenolacrylate whose alkyl group comprises at least five C-atoms, and in that the second type of monomer is an alkylacrylate whose alkyl group comprises at least 8 and maximally 18 C-atoms.

3. A method as claimed in Claim 1, characterized in that the quantity of each of the two types of monomers is at least 20% by weight, calculated with respect to the overall quantity of both types of monomers.

4. A method as claimed in Claim 1, characterized in that the mixture is introduced into the cell under the influence of a reduced pressure.

5. A polymerizable mixture which can suitably be used in a polymer-dispersed liquid crystal cell, which mixture comprises reactive monomers and a photoinitiator, characterized in that the mixture contains two types of non-volatile reactive monomers, the first type of monomer being readily miscible with a liquid crystalline material and the second type of monomer being poorly miscible with said liquid crystalline material.

Sub. A1  
6. A polymerizable mixture as claimed in Claim 5, characterized in that the first type of monomer is an ethoxylated alkyl-phenolacrylate whose alkyl group comprises at least five C-atoms, and in that the second type of monomer is an alkylacrylate whose alkyl group comprises at least 8 and maximally 18 C-atoms.

7. A polymerizable mixture as claimed in Claim 5, characterized in that the quantity of each of the two types of monomers is at least 20% by weight, calculated with respect to the overall quantity of both types of monomers.

8. A polymerizable mixture as claimed in Claim 5, characterized in that a quantity of 70-90% by weight of a liquid crystalline material is added to the mixture.

9. A display device comprising a polymer-dispersed liquid crystal cell with a matrix of individually drivable rows and columns of electrodes as well as means for driving these electrodes, characterized in that a cell manufactured in accordance with the method claimed in Claim 1 is used in said display device.